



# Work Order ID 50761



Page 1

July 21, 2009 2:31:11 PM

Item ID: D2580-1

Accept



Setup Start



Revision ID: D

Stop



Item Name: 205 Skidtube bent detail



Cust Item ID:

Start Date: 07/23/2009 Start Qty: 6.00

Customer:



Required Date: 07/31/2009 Req'd Qty: 6.00



Reference:

Approvals:

Process Plan: MF

Date: 09-07-21

QC:

Tooling: Date: SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2580	Rev D

100 0.00



HandFinish

Memo

Hand Finishing

- 1- Inspect mat'l D2500-1-190 for damage.  
2- Chemical Conversion Coat as per QSI 005 4.1

110 0.00



Skidtubes

Memo

Skidtubes

- 1- Drill pilot holes using drill jig DT 8149 (Do not use cutting fluid)  
2- Open holes to 0.500" as per Dwg D2580 without cutting fluid  
3- Deburr and blow out all chips from inside of tube  
4- Bond web in place per QSI 015.

b

19-8-10

6

BE 9-8-13

Pick:

Qty  Part Number  Description  Batch  
 A/R  Sikaflex-291   Sikaflex expire date: \_\_\_\_\_ →

m111557 EXP 01/2010  
 m112391 EXP 02/2010

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 50761**

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Item ID: D2580-1

Accept



Setup Start



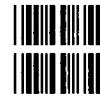
Revision ID: D

Stop



Item Name: 205 Skidtube bent detail

Start Date: 07/23/2009 Start Qty: 6.00



Cust Item ID:

Required Date: 07/31/2009 Req'd Qty: 6.00



Customer:

**Reference:**

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

**Sequence ID/  
Work Center ID****Operation  
Description**Set Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120



QC

Quality Control

QC3- Inspect Part Finish

0.00

(6)

9/8/17

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

L6

(6)

9-8-17

140



Packaging

Packaging

Identify as per dwg &amp; Stock Location: L6

0.00

L6

(6)

9-8-17

Dart Aerospace Ltd

W/I/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 50761**

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July 21, 2009 2:31:11 PM

Item ID: D2580-1

Accept



Setup Start



Revision ID: D

Stop



Item Name: 205 Skidtube bent detail

Start Date: 07/23/2009 Start Qty: 6.00



Cust Item ID:

Required Date: 07/31/2009 Req'd Qty: 6.00



Customer:

**Reference:**

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

**Sequence ID/  
Work Center ID**

150



QC

Quality Control

**Operation  
Description**

QC21- Final Inspection - Work Order Release

**Set Up/  
Run Hours**

0.00

**Draw  
Number****Draw  
Rev.****Plan  
Code****Accept  
Qty****Reject  
Qty****Reject  
Number****Insp.  
Stamp**

0.00

Memo

09/08/1998  
MF 09-08-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Page 1

July 21, 2009 2:31:11 PM

Work Order ID: 50761



Parent Item: D2580-1RevD



Parent Item Name: 205 Skidtube bent detail

Start Date: 07/23/2009

Required Date: 07/31/2009

Comments:

Start Qty: 6.00

Required Qty: 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2500-1-190RevU/R 	Ext'n 'I' Beam Tube 4"	Manufactured	No			100	Each	0.0000	6.0000	250166 2		11-9-2010
D2596RevD 	Web, 205 Skidtube	Manufactured	No			110	Each	4.0000	6.0000	B 46463 4		

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
Main Warehouse		
LG	4	B - 50263 6
50361	4	DE 7813

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN <i>#</i>	DRAWN BY <i>RF</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D2580
		REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY SCALE NTS
A	96.09.16	NEW ISSUE
B	96.12.02	AS MANUFACTURED
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183

**RELEASED**  
*07.06.28 #*

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AEIS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

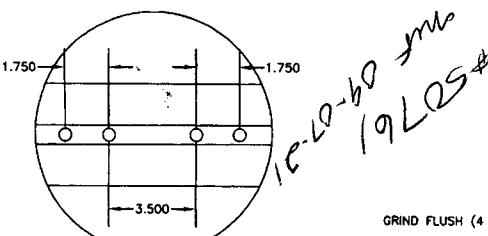
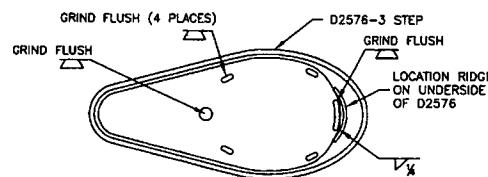
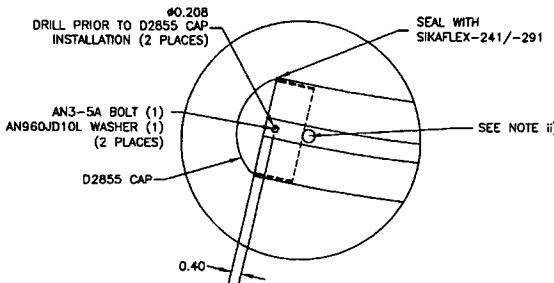
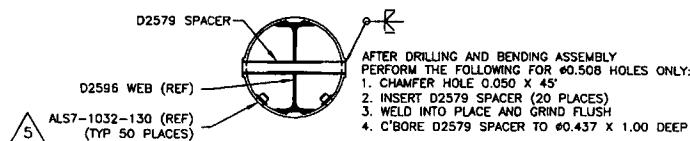
**GENERAL NOTES:**

- 10/10/00  
JRW  
10/10/00*
- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 2) ALL DIMENSIONS ARE IN INCHES
  - 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
  - 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
  - 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241-291.
  - 6) WELDING TO BE DONE PER DART QSI 004.
  - 7) FINISH:  
SEE NOTES ON  
PAGE 2 FOR D2580-041 AND  
PAGE 3 FOR D2580-045
  - 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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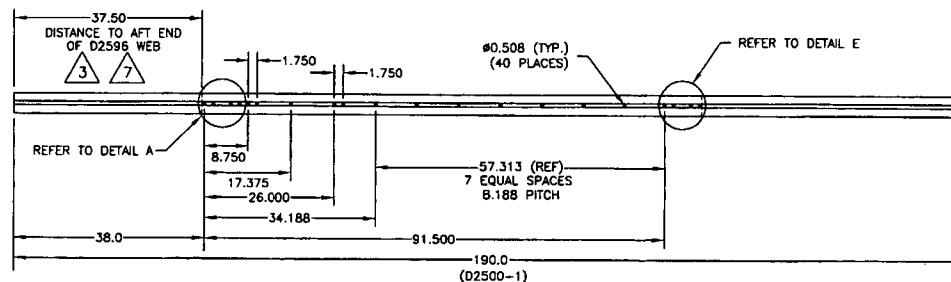
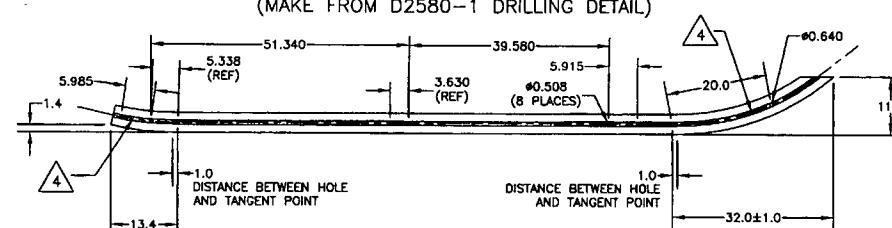
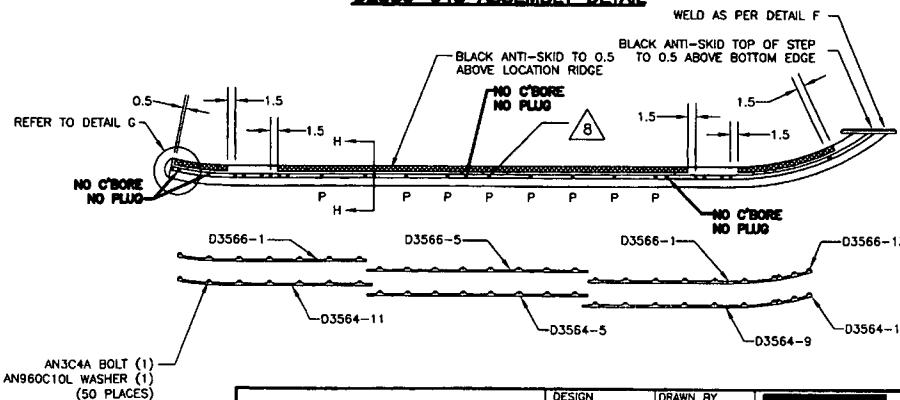


**DETAIL E**  
SCALE 5:24**RELEASED**  
07-06-28**DETAIL F**  
SCALE 5:24**DETAIL G**  
SCALE 5:24**SECTION H-H**  
SCALE 5:24

C

**D2580-045 NOTES**

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB  
POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4
- ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE  
WITH THE SPACER AT THIS LOCATION

**D2580-1 DRILLING DETAIL****D2580-5 BENDING AND CUTTING DETAIL**  
(MAKE FROM D2580-1 DRILLING DETAIL)**D2580-045 ASSEMBLY DETAIL**

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04	04				REV. 0
CHECKED	APPROVED			DRAWING NO.	
				D2580	SHEET 3 OF 3
DATE	TITLE			SCALE	
07.02.27	205 SKIDTUBE ASSEMBLY				1:24